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## **PART IV: COST AND REVENUE ANALYSIS FOR SELECTED MICRO-AREA ECONOMIC DEVELOPMENT**

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The Eastern Sector's 17,800 acres of developable land provide an excellent opportunity to guide development, leveraging Houston's existing infrastructure and accommodating a large portion of the City's projected population growth. This can be accomplished through a combination of infrastructure improvements, environmental remediation, economic incentives.

The completion of State Highway 90 will enhance east-west mobility and increase opportunities for development along the corridor. The widening of East Little York will also improve east-west mobility and both residential and industrial investment opportunities. Similarly, the proposed extension of North Wayside to Beltway 8 will improve north-south mobility and increase the potential for new residential development in this area. A large undeveloped property could be developed as a residential subdivision with quick access to State Highway 59 and Beltway 8. The Port of Houston and affiliated industries in the sector will continue to expand and create jobs and a proposed light rail line on Harrisburg would stimulate both residential and commercial growth. New employment will provide a cash flow to improve the quality of life increasing land values and the City's tax base.

Although a number of conditions will increase the cost of development within this sector, if the issues of infrastructure and access are addressed, the potential for new development and for the economic stabilization of the study area is very positive. Two micro-areas with development/redevelopment potential within this sector were identified with the purpose of estimating the general cost of providing infrastructure for projected future development. For these areas, two population and employment scenarios were examined to illustrate the potential tax revenues that might be realized if 1) current growth patterns continued over the next 20 years, and 2) if growth rates are more aggressive over the

next 20 years. Note that this analysis is intended for illustrative purposes only and does not suggest that infrastructure investments estimated here will alone result in accelerated population and employment growth.

The method for projecting population and employment was tailored for each micro-area. Traffic Analysis Zone projections from Houston-Galveston Area Council were used for Scenario 1 projections, unless otherwise noted. Total build out scenarios, regional growth rates, regional population and employment shares, building permit activity and other factors were used to generate projections for Scenario 2.

### **Study Areas**

Two micro-areas in the sector were selected for analysis, based on their development potential, which takes into account existing conditions and constraints and significant amounts of vacant, developable land. Future development in the Wayside micro-area is anticipated to be largely residential and commercial with some light industrial. This area has some large undeveloped tracts of land. The Harrisburg micro-area, on the other hand, provides a more challenging opportunity for future growth because of large numbers of infill land opportunities or redevelopment of industrial, commercial and residential parcels.

### **1. Population and Employment Estimates**

#### **General assumptions**

The study anticipates that population growth in Houston will continue along established patterns of migration to the suburbs and employment will be drawn to major activity centers. The micro-areas (Harrisburg and Wayside) will be under increasing influence of the Port of Houston, transportation, the petrochemical industry and extensive improvement of the road and rail network.

Population decline in the micro-areas, an effect of migration to the suburbs, could be slowed down or reversed by policy interventions to address unemployment, homeownership, transportation needs and poor housing conditions. New residential

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development could occur in current vacant land or in abandoned industrial or commercial sites with minimal environmental contamination.

The first scenario, which assumes a continuation of current trends in population and employment with minimal city investment, is based on three county (Harris, Fort Bend and Montgomery) estimates. In this scenario, the population share of the Wayside micro-areas will decrease slightly to 3.26% in 2025 from 3.82% in 2000. With intervention, the population share could increase from 3.26% to 4.62% by 2025. Also with intervention, the employment share could increase from 1.57% in 2000 to 1.88% by 2025 assuming that the industrial and commercial sectors of the economy remain strong (see Appendix B). Following current trends, the Harrisburg micro-area population share will decrease from 2.99% in 2000 to 1.42% by 2025. With intervention, the population share in the Harrisburg micro-area could increase from 1.42 to 3.59 in 2025.

The second scenario is predicated on strong intervention that addresses the issues presented in the existing conditions analysis. This includes but is not limited to infrastructure improvement to targeted areas especially along Harrisburg and N. Wayside, environmental remediation, park improvements along the Bayou, extension of the Metro rail to East End, heavy rail safety and mobility improvements, revitalizing distressed neighborhoods and encouraging better use of commercial land. First, build-out scenarios were prepared based on prevailing densities, average family size, standard floor area ratios and standard employee per square foot measures (see Appendix B). Then, regional growth rates, regional population and employment shares and building permit data were examined to determine what proportion of the build out scenario would occur over the planning horizon. In Scenario 2 population share of the micro-areas as part of the metropolitan area would stabilize.

Note that micro-areas were chosen for illustrative purposes only. Scenario 2 assumes that some population and employment would be drawn to the area if improvements were made; however, conditions in these micro-areas have not been compared with similar areas in the Eastern Houston

sector. Population and employment shares were compared with regional figures from the Houston-Galveston Area Council (particularly, Harris County, Fort Bend County and Montgomery County).

## Harrisburg Micro-Area

### Area character and trends

The Harrisburg micro-area covers 3,912 acres and had a population of 58,455 according to the 2000 census. Over 14 % of the land is undeveloped; 10% is industrial and about 6% is commercial.

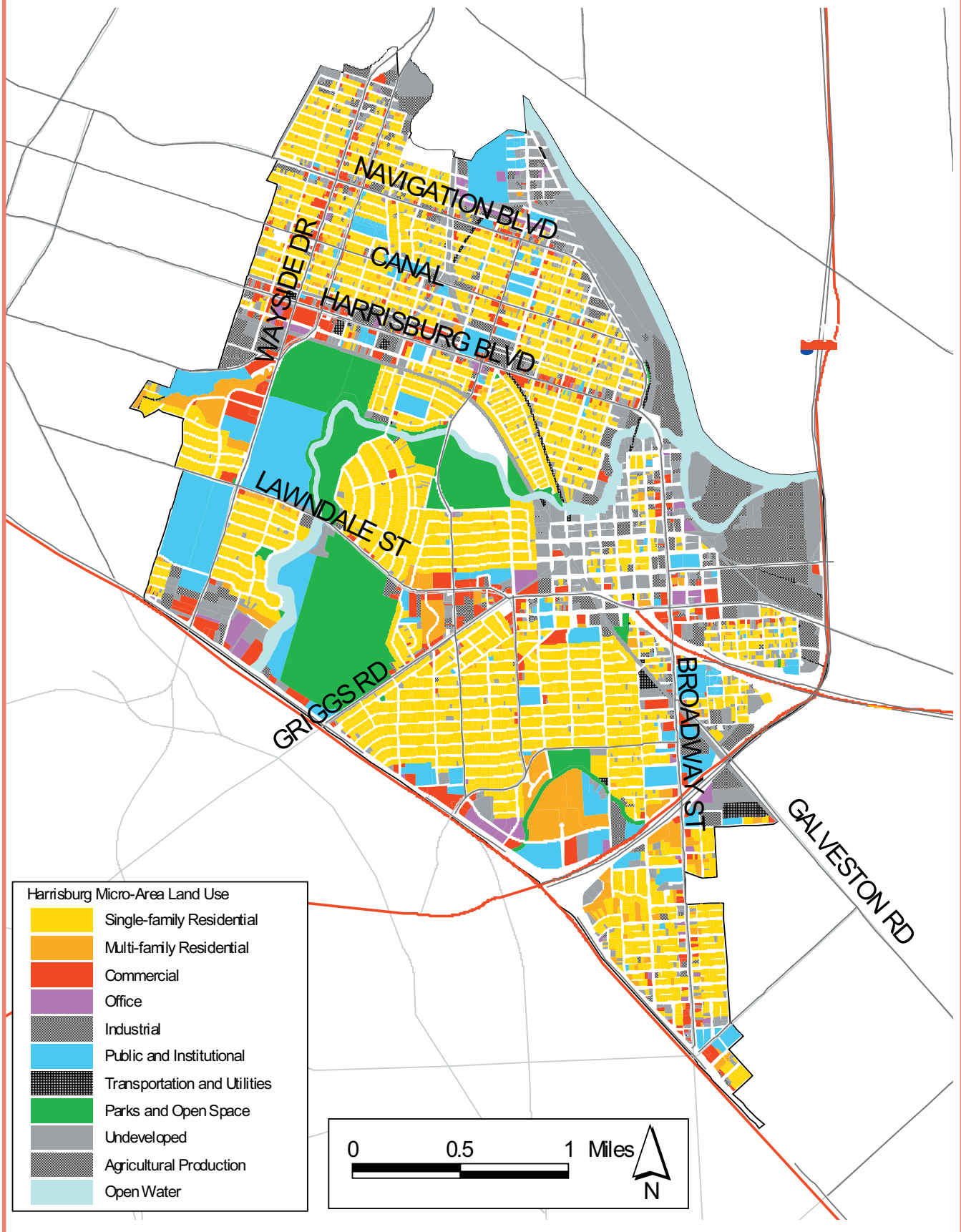
Prospects for commercial and residential redevelopment in the area are high. This would be partly due to recent improvements in the east end of downtown such as the Minute Maid Stadium, the Toyota Center, expansion of the George R. Brown Convention Center and the new Hilton of the Americas Convention Hotel and partly due to proposed improvements at the port and related industries.

### Projected Growth Scenarios

In Scenario 1, growth in the Harrisburg micro-area is assumed to continue as predicted in H-GAC's moderate growth scenario. H-GAC's estimates were developed using a geographic boundary called Traffic Analysis Zones (TAZ). Since TAZs do not correspond with the Harrisburg micro-area boundary, an average estimate of those that were largely represented in the micro-area was calculated. The resulting growth rate was used to represent the yearly growth rate for the micro-area.

Scenario 2 assumes a more aggressive growth rate due to intervention in infrastructure and related investment by the City. In this scenario, population and employment would increase by almost 3%. This increase corresponds to over 6,911 in single-family units and 7,223 multi-family units for the 25- year projection period. A similar increase in employment could also generate an additional 15,229 jobs for the same period (see table). Note that these projections are used for illustrative purposes only and do not necessarily reflect the actual figures for the period.

Map 4: Harrisburg Micro-Area Land Use



Source: COHGIS

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# Wayside Micro-Area

## Area Character and Trends

The Wayside micro-area covers 3,961 acres and had a population of 16,268 according to the 2000 census. Over 30 % of the land is undeveloped; 18% is industrial and only about 1% is commercial. Population is projected to increase by 0.89% and employment by 2.35% each year. This increase would result in an increase of 966 single-family units and 48 multi-family units over the 25-year period. The projected increase in employment (2.35%) would also yield an additional 4,186 jobs.

Scenario 2 represents the results of a stronger intervention that increases the current growth rate of development. In this scenario, both population and employment of the Wayside Micro-Area would increase by 2.5% each year. These projected increases would yield 3,428 single-family units, 170 multi-family units and 4,453 jobs over 25 years (see table).

## 2. Revenue Estimates

### General assumptions

Tax revenues for the City generated by new growth were estimated for both scenarios in the two micro-areas.<sup>1</sup> Ad valorem taxes, sales taxes and hotel taxes were all estimated. It is assumed that:

- No major economic changes in the real estate market occur throughout the period;
- Annual growth rate is constant;
- Ad valorem property, sales and hotel occupancy tax rates do not increase;
- All single-family units are homestead properties eligible to receive homestead exemptions;
- All institutional structures are tax exempt; and
- All commercial square footage generates sales tax.

The Harrisburg Micro-Area lies between the east end of Downtown and the Port of Houston. Economic development along the east end of Houston

Downtown has been robust and promising partly due to the advent of the Minute Maid Park, the Toyota Center, the new Hilton of the Americas Convention Hotel and recent extension of the Brown Convention Center. The resurgence of high-end housing initiative like the Alexan Lofts, proposed Metal Town Homes (with a Downtown view), additional hotel space and restaurants are apparent signs of the growth pattern on this part of the City. The projected development in the area would have a high potential of including warehousing, transportation, housing infill/redevelopment, high-tech industrial and the petrochemical industry.

Another positive enhancer for future job growth in the Harrisburg Micro-Area is the Greater East End Management Workforce Development Initiatives program. In this unique program, the Greater East End is charged with spending 3% its annual district assessment funds for workforce development services through partnership with the Houston Community College-Southeast. Such development efforts have a potential to yield significant results in the form of additional tax revenues.

## 3. Infrastructure Cost Estimates

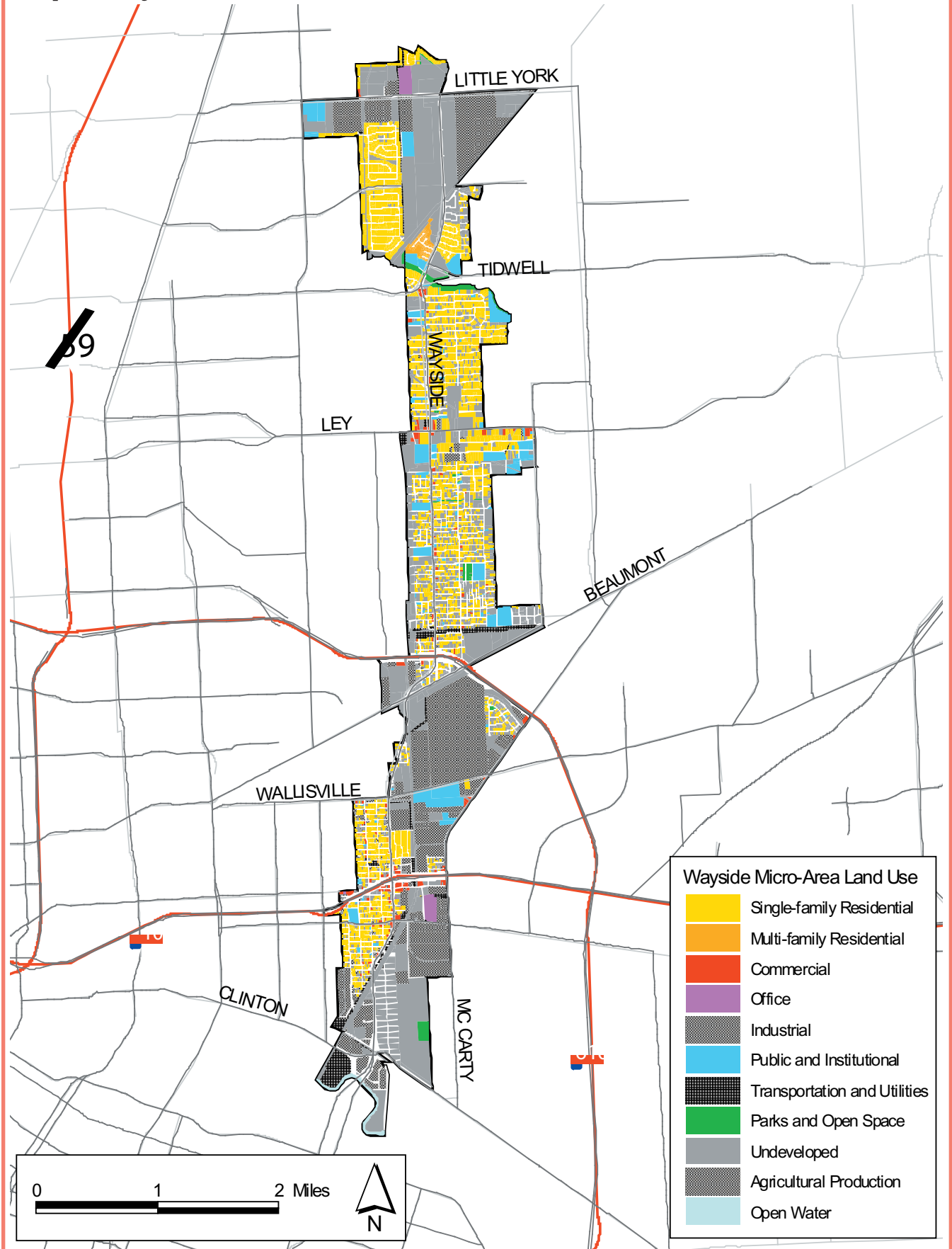
The cost of constructing water and sewer lines in undeveloped areas, improving existing water and wastewater lines and of completing major thoroughfares was explored to give a rough estimate of the magnitude of CIP investment needed to address infrastructure issues discussed earlier in this report. Following is a description of the general improvements considered along with linear footage and cost per linear foot.

## 4. Regional Share Analysis

Examining population and employment growth as part of a regional share analysis provides insight on how projected growth for the Eastern Sector study area and micro-areas (Wayside and Harrisburg) compare to larger, regional growth trends for population and employment. If an area has a growing regional share it is performing better than surrounding areas. If an area maintains a constant share the area is neither gaining nor losing ground compared to the region. If an area is losing regional



**Map 5: Wayside Micro-Area Land Use**



Source: COHGIS

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share, it is growing more slowly than the surrounding region.

This analysis shows that, if current trends continue, compared to the rest of the City and the larger 3-county region (Harris, Montgomery Fort Bend), the east sector will lose population and employment share as the region grows more quickly than the sector. The intervention scenarios proposed have the potential to alter this outcome such that the study area could surpass City of Houston growth and maintain a constant share compared to the 3-county region.

#### **Note:**

In this exercise 2003 employment data was utilized because 2000 sector level employment data was not available. Different employment estimate methods can produce widely divergent employment total estimates. In this exercise the 2003 sector level data is from a different source than the base from which the 2025 estimates are derived and therefore the methodologies are probably different. Given this inconsistency, the share percentage may well be incorrect. However, since a consistent comparison is used between 2003 and 2025 for the intervention scenario, the relative changes accurately indicate the intervention scenario's potential relative to a non-intervention scenario even if the regional share is in doubt.

### **General Assumptions**

The cost of providing water, wastewater and roads was calculated by estimating the length of new facilities needed to serve future growth. Of the three components of cost (capital, maintenance and interest), we assume that the most important would be the cost of capital; therefore the model uses only this component.

Figures for calculating unit costs were provided by the Department of Public Works and Engineering and are listed in Appendix D. Costs were calculated for Scenario 2 only because this scenario is built on the assumption of additional infrastructure requirements, while Scenario 1 is not. Projects already in the CIP were not included in the estimates.

## **Wayside Micro-Area**

Infrastructure costs in this area were based on the installation of new water and wastewater trunk lines to underserved areas, replacing 1.275 million feet of water lines that are too small, widening Little York between US 59 and Wayside, and extending Wayside north to Beltway 8. Analysis by City of Houston Public Works and Engineering estimates that investment for additional or upgraded lines needed to support the growth predicted in the Scenario 2 would be approximately \$1.2 million in water lines and \$5.1 million in wastewater lines. The cost to improve the major thoroughfare network (Little York from US 59 to Wayside) would be \$11.1 million

## **Harrisburg Micro-Area**

The Harrisburg micro-area has a fairly well developed infrastructure system for water and wastewater. However, much of this system is quite old and may lack the capacity needed to support new development and increased densities. Analysis by City of Houston Public Works and Engineering estimates that investment for additional or upgraded lines needed to support the growth predicted in the Scenario 2 would be approximately \$1.7 million in water lines and \$4.9 million in wastewater lines. Scenario 2 was not based on any significant roadway improvements.

(Footnotes)

<sup>1</sup> Revenues for other taxing jurisdictions including Harris County and HISD are not considered.